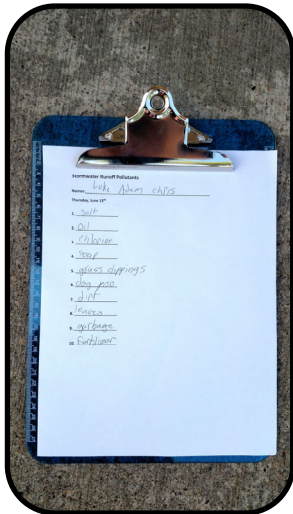


2021 Appleton Summer Camp

A Renew Our Waters flyer was provided for campers at the end of each lesson.

Week 1: All About Stormwater

Fox-Wolf staff talked with summer campers about stormwater runoff. We used the wheel of pollution to talk about different pollutants that can run off the land and end up in our waterways. After that, the campers were separated into three groups and started off at one of our three stormwater stations. One station was led by Anna who demonstrated the Enviroscape model. Another station had the kids playing the stormwater plinko game, and the last station had the campers looking for 10 pollutants using the stormwater find-it jars. The kids all received a free pair of sunglasses from Fox-Wolf. **(30 campers reached)**



Week 2: Floodplains & Watersheds

This week, Fox-Wolf staff talked with summer campers about stormwater runoff again as most of the campers this week had not attended the previous week. We discussed stormwater runoff pollutants and the kids were able to come up with the 10 pollutants featured on the wheel of pollution, without the wheel present. We then discussed flooding and floodplains and the importance of picking up after your pets. After that, the campers were separated into three groups and started off at one of our three stations. One station had the campers picking up fake dog poop in the pet waste pickup relay race. Another station had the kids playing the storm pipe race game where campers raced through tunnels and grabbed a container. When the race was done, they opened the containers to read what was written on the paper inside. The papers either had rainwater or a pollutant written on the paper. The team with the least pollutants won. The last station was the Ward's floodplain model station. At this station, the kids learned how flooding impacts land downstream and how stormwater ponds and wetlands help to capture water and slow it down. **(21 campers reached)**



Week 4: Prairie Pastimes

Fox-Wolf talked about the importance of prairies in our watershed. We demonstrated the root lengths of various native plants, and the campers got a hands-on look at this when they were assigned a native plant that they had to draw with chalk, measuring out the average height of the plant and depth of its roots. The kids each had their photo taken in the park's prairie planting, the photos were printed, and the campers were able to decorate the frames. (27 campers reached)



Week 5: All About Algae

Using pictures, we talked with the campers about different types of algae including green algae, brown algae, diatoms, and blue-green algae. We also talked about plants that are often mistaken for algae, like duckweed and water ferns. We talked about the good and bad with algae—how algae produce approximately half of the oxygen on the planet, and also how blue-green algae produce toxins that can be a health concern. We discussed how human choices impact algal growth in our local lakes and rivers. Next, we used nets to pull algae from the fishing pond and determined that it was a type of filamentous green algae. Afterwards, the campers made green algae slime—and had a whole lot of fun doing it! (26 campers reached)



Week 6: Stream Health

Week 6 of APRD Summer Camp started out with a lesson about stream health and how we determine if streams are healthy based on the animals that live in them. Campers learned about biotic indices, which show the quality of an environment predicted by the types and abundances of organisms collected. They also learned about the types of pollution which negatively affect stream ecosystems and impact biotic measures. After talking about common types of stream bugs, the young scientists got to work on collecting their own samples! Carrying nets, buckets, and magnifying glasses, the campers entered the stream at Appleton Memorial Park to find out what bugs live there, and what those bugs could tell us about the quality of the water. The campers thought the coolest bug they found was a large dragonfly larva! After stream sampling, the campers cleaned up and played several rounds of stream bingo. **(29 campers reached)**



Citizen Monitoring

Biotic Index for Streams and Rivers

1 Circle the animals found in each category

GROUP 1: Sensitive to pollutants

Stonefly Larva, Water Snipe Fly Larva, Dabsonfly Larva, Alderfly Larva

GROUP 3: Semi-tolerant of pollutants

Blackfly Larva, Scud, Snails: Gilled or Orb, Non-red Midge Larva

GROUP 2: Semi-Sensitive to pollutants

Caddisfly Larva, Cranefly Larva, Riffle Beetle, Dragonfly Larva, Mayfly Larva, Damselfly Larva, Water Penny Larva

GROUP 4: Tolerant of pollutants

Bloodworm, Midge Larva (red), Pouch Snail (left-side opening), Aquatic Sowbug, Leech, Worms: Tubifex, Threadworm or Roundworm

2 Tally animals circled in each category. Then multiply by number given.

Group 1: Sensitive	_____	X 1 =	_____
Group 2: Semi-sensitive	_____	X 3 =	_____
Group 3: Semi-tolerant	7	X 2 =	14
Group 4: Tolerant	28	X 1 =	28
Total	33	(E)	40 (F)

3 Divide (F) by (E): 40 ÷ 33

4 Index Score (F+E) 1.21

5 How Healthy is the stream?

3.6 and up	Excellent
2.6-3.5	Good
2.1-2.5	Fair
1.0-2.0	POOR

Week 7: Litter Lesson

Campers learned about the harmful effects of litter pollution on aquatic environments, wildlife, and human health. They were shocked that more than half of the almost 22 million pounds of plastic litter that enters the Great Lakes each year ends up in Lake Michigan, which receives runoff from many regions including Wisconsin's Fox-Wolf river basin, where all of the campers live. After the lesson, campers split into 3 teams for a friendly competition to see which group could pick up the most litter by weight. The contest prizes were reusable products which replace single-use plastics. Each contestant received a cooler bag, water bottle, or 2 metal straws. Many campers said they were surprised by how fun it was to pick up litter and excitedly reported their most interesting finds. In total, about 12.5 pounds of litter were recovered! **(27 campers reached)**



Week 8: Invader Crusaders

For the final week of summer camp, we talked about what makes a plant or animal invasive and how invasive species can harm the environment. Campers learned about the ways aquatic invasive species (AIS) have gotten into Wisconsin's waters. John Moyles of J & R Aquatic Animal Rescue explained how he helps prevent the establishment of AIS by providing a rehoming service for pet fish, amphibians, and reptiles. When nonnative pets are released into the wild, they can become invasive. After discussing the importance of pet surrender, John introduced some native and nonnative animals that are under his care. The campers' favorite animal was the large bullfrog which could stretch to a length of 1 foot! The lesson ended with a touch tank that allowed campers to interact with minnows, crayfish, and leeches. **(27 campers reached)**

